



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,421	08/20/2003	Peter Hans Redweik	11200	6962
<div>26800 7590 02/02/2009</div> <div>JAMES M. STOVER</div> <div>TERADATA CORPORATION</div> <div>2835 MIAMI VILLAGE DRIVE</div> <div>MIAMISBURG, OH 45342</div>				
<div>EXAMINER</div> <div>LEMIEUX, JESSICA</div>				
<div>ART UNIT</div> <div>3693</div>		<div>PAPER NUMBER</div>		
<div>MAIL DATE</div> <div>02/02/2009</div>		<div>DELIVERY MODE</div> <div>PAPER</div>		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/644,421

Applicant(s)

REDWEIK, PETER HANS

Examiner

JESSICA L. LEMIEUX

Art Unit

3693

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/13/2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 4-9, 11-19, 22-27, 29-37, 40-45 and 47-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4-9, 11-19, 22-27, 29-37, 40-45 and 47-54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 13th, 2008 has been entered.

Response to Arguments

2. Applicant argues that Sandretto does not specifically teach "applying one or more FV propensity rules to the selected accounts and applying one or more FV attrition rules to results of the FV propensity rules using the selected amounts and rates." Applicant further states that "Sandretto refers only to determining a discount rate using an initial risk measure, discounting the inflation-adjusted cash flows at the discount rate to determine a present value for each set of cash flows, and then using the present values to determine simulated returns for each asset." Examiner respectfully disagrees.

Examiner notes that applicant's specification conceptually defines attrition rates as "the rate at which a cash flow will be decreased" (page 8, lines 25-26). Johnson teaches a discount factor. One skilled in the art at the time the invention was made would understand that a discount factor is a rate used to discount or decrease future cash flow. Sandretto also teaches applying attrition rules/risk/rates (abstract & column 8, line 60-column 9, line 9). Examiner further notes that propensity is the probability that

something is likely to happen, a risk measure. Johnson teaches risk. One skilled in the art at the time the invention was made would understand that propensity rules are rules that measure and determine risk, and consequently rates used to discount or decrease future cash flow to obtain a net present value. Examiner also notes that the equation in the reference is a Future Value (FV) equation solving for Net Present Value (NPV). It would have further been obvious to one skilled in the art at the time the invention was made that this equation could easily be manipulated to solve for Future Value or any of the other variables in the equation. Sandretto further teaches applying propensity rules/amounts/rates (abstract & column 4, lines 13-16 & column 5, lines 12-14). Therefore, it would have also been obvious to one skilled in the art at the time the invention was made that propensity rules are rules that measure and determine risk and are used as taught by Johnson and Sandretto in order to determine an asset's discount rate and therefore future value. Examiner lastly notes that applying both attrition and propensity rates/rules/etc. as measures of risk as taught by Johnson and Sandretto allow for accounting for both the increases and decreases of value needed to more accurately estimate future value resulting from expected price changes such as inflation. Examiner lastly, asserts that Sandretto teaches applying one or more FV propensity rules (inflation-adjusted cash flows) to the selected accounts and applying one or more FV attrition rules (discounting the inflation-adjusted cash flows at the discount rate) to results of the FV propensity rules using the selected amounts and rates.

3. Applicant argues that Sandretto does not specifically teach "matching the results of the FV propensity rule to the matched accounts." Applicant further states "there is no matching being performed, no matched accounts and no discussion of FV propensity rules [instead] Sandretto refers only to adjusting original cash flows for expected inflation." Examiner respectfully disagrees. Examiner asserts that Sandretto teaches applying one or more FV propensity rules (inflation-adjusted cash flows) to the selected accounts. Further, since Sandretto specifically teaches adjusting the original set of cash flows and each additional set of cash flows for expected inflation, which is done by matching the accounts to the propensity rules and invariably recognizing which account the propensity rules were applied to, Sandretto maintains a differential between the cash flows. Therefore, the prior art teaches matching the matched accounts to the results of the FV propensity rules.

4. Applicant argues that Sandretto does not specifically teach "obtaining an attrition rate for the matched accounts." Applicant further argues "there is no matching being performed, no matched accounts, and no discussion of attrition rates [instead] Sandretto refers only to determining a discount rate using an initial risk measure, and discount rates are not attrition rates (attrition rates are defined in Applicant's specification as the rate at which a cash flow will be decreased, whereas a discount rate is an interest rate that states future cash flows in current dollars)." Examiner respectfully disagrees. Examiner asserts that Sandretto teaches applying one or more NPV forecast rules (inflation-adjusted cash flows) to the selected accounts. Further, since Sandretto specifically teaches adjusting the original set of cash flows and each

additional set of cash flows for expected inflation, which is done by matching the accounts to the attrition rules and invariably recognizing which account the attrition rules were applied to, Sandretto maintains a differential between the cash flows. Examiner further notes that applying both attrition and propensity rates/rules/etc. as measures of risk as taught by Johnson and Sandretto allow for accounting for both the increases and decreases of value needed to more accurately estimate future value resulting from expected price changes such as inflation. Examiner agrees with Applicant that a discount factor is a the rate used to derive net present value of a sum of money to be paid at a future date, however since future value is not always more than the present value, it would be obvious to one skilled in the art at the time of invention that a discount factor can also be used as Applicant's attrition rate. Therefore, the prior art teaches obtaining an attrition rate for the matched accounts.

5. Applicant argues that Sandretto does not specifically teach "calculating an effective attrition rate for each forecast period from the attrition rate and a net change rate defined in the FV attrition rule for each forecast period." Applicant further argues "there is no discussion of effective attrition rates, and no discussion of calculations being performed for each forecast period [instead] Sandretto refers only to determining a discount rate using an initial risk measure, discounting the inflation-adjusted cash flows at the discount rate to determine a present value for each set of cash flows, and then using the present values to determine simulated returns for each asset." Examiner respectfully disagrees. Examiner further notes that applying both attrition and propensity rates/rules/etc. as measures of risk as taught by Johnson and Sandretto

allow for accounting for both the increases and decreases of value needed to more accurately estimate future value resulting from expected price changes such as inflation. Examiner agrees with Applicant that a discount factor is a the rate used to derive net present value of a sum of money to be paid at a future date, however since future value is not always more than the present value, it would be obvious to one skilled in the art at the time of invention that a discount factor can also be used as Applicant's attrition rate. Examiner also notes that Sandretto teaches a net change rate (inflation rate) for each forecast period. Examiner further notes that Sandretto explicitly states "determine an initial discount rate for each asset using the initial input risk measure for each asset and using different economic variables for each set of cash flows. Therefore, the prior art teaches calculating an effective attrition rate for each forecast period.

6. Applicant argues that Sandretto does not specifically teach "performing the FV attrition rule to calculate an FV expected value from the effective attrition rate and a propensity rule amount defined in the FV attrition rule." Applicant further states ""there is no discussion of an FV attrition rule or FV expected values, and no discussion of effective attrition rates or propensity rule amounts [instead] Sandretto refers only to determining a discount rate using an initial risk measure, discounting the inflation-adjusted cash flows at the discount rate to determine a present value for each set of cash flows, and then using the present values to determine simulated returns for each asset." Examiner respectfully disagrees.

Examiner notes that applicant's specification conceptually defines attrition rates as "the rate at which a cash flow will be decreased" (page 8, lines 25-26). Johnson teaches a discount factor. One skilled in the art at the time the invention was made would understand that a discount factor is a rate used to discount or decrease future cash flow. Sandretto also teaches applying attrition rules/risk/rates (abstract & column 8, line 60-column 9, line 9). Examiner further notes that propensity is the probability that something is likely to happen, a risk measure. Johnson teaches risk. One skilled in the art at the time the invention was made would understand that propensity rules are rules that measure and determine risk, and consequently rates used to discount or decrease future cash flow to obtain a net present value. Examiner also notes that the equation in the reference is a Future Value (FV) equation solving for Net Present Value (NPV). It would have further been obvious to one skilled in the art at the time the invention was made that this equation could easily be manipulated to solve for Future Value or any of the other variables in the equation. Sandretto further teaches applying propensity rules/amounts/rates (abstract & column 4, lines 13-16 & column 5, lines 12-14). Therefore, it would have also been obvious to one skilled in the art at the time the invention was made that propensity rules are rules that measure and determine risk and are used as taught by Johnson and Sandretto in order to determine an asset's discount rate and therefore future value. Examiner lastly notes that applying both attrition and propensity rates/rules/etc. as measures of risk as taught by Johnson and Sandretto allow for accounting for both the increases and decreases of value needed to more accurately estimate future value resulting from expected price changes such as

inflation. Examiner agrees with Applicant that a discount factor is a the rate used to derive net present value of a sum of money to be paid at a future date, however since future value is not always more than the present value, it would be obvious to one skilled in the art at the time of invention that a discount factor can also be used as Applicant's attrition rate. Examiner therefore asserts that Sandretto teaches performing the FV attrition rule (discounting the inflation-adjusted cash flows at the discount rate) to calculate an FV expected value from the effective attrition rate and a propensity rule amount defined in the FV attrition rule."

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 4-5, 7, 19, 22-23, 25, 37, 40-41 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Number 7,082,411 to Johnson et al (hereinafter Johnson) in view of US Patent Number 5,812,988 to Sandretto (hereinafter Sandretto).

As per claims 1, 19 and 37

Johnson discloses selecting in one or more computers, accounts, amounts and rates (asset data) from account data stored in a database using selection criteria specified by one or more rules (column 4, lines 10-19) and performing in one or more computers one or more Future Value (FV) (C_1 , expected payoff) calculations on the selected accounts by applying one or more FV attrition rules (discount factor) to the selected accounts using the selected amounts and rates, wherein the FV calculations determine possible future profitability value (score) of products that may be purchased

in the future(column 9, lines 3-26 & 58-60). Johnson discloses the FV (C_1) is a possible future profitability value (expected payoff) (column 9, lines 3-10).

Examiner notes that applicant's specification conceptually defines attrition rates as "the rate at which a cash flow will be decreased" (page 8, lines 25-26). Johnson teaches a discount factor. One skilled in the art at the time the invention was made would understand that a discount factor is a rate used to discount or decrease future cash flow to obtain a net present value. Examiner further notes that the equation in the reference is a Future Value equation solving for Net Present Value (NPV). It would have been obvious to one skilled in the art at the time the invention was made that this equation could easily be manipulated to solve for Future Value or any of the other variables in the equation.

Johnson does not specifically teach matching results of a FV propensity rule to the matched accounts, obtaining an attrition rate for the matched accounts, calculating an effective attrition rate for each forecast period from the attrition rate and a net change rate defined in the FV attrition rule for each forecast period, performing the FV attrition rule to calculate an FV expected value from the effective attrition rate and a propensity rule amount defined in the FV attrition rule and storing the FV amount.

Sandretto teaches matching results of a FV propensity rule to the matched accounts (column 8, lines 65-67), obtaining an attrition rate for the matched accounts (column 9, lines 2-7), calculating an effective attrition rate (column 9, lines 2-9) for each forecast period (column 10, lines 1-7) from the attrition rate (column 9, lines 2-9) and a net change rate (inflation rate) (column 17, lines 18-42) defined in the FV attrition rule for each forecast period (column 10, lines 1-7), performing the FV attrition rule (column 9, lines 2-9) and a propensity rule amount defined in the FV attrition rule (column 8, line 60- column 9, line 19) and storing the FV amount (column 23, lines 25-26 and 60-61) and column 24, lines 17-23). Examiner notes that the reference teaches both storing projected returns as well as storing Net Present Value, the components of Future Value. It would have been obvious to one skilled in the art at the time the invention was made that storing of the components of Future Value could be used to easily determine the FV amount as FV is merely a calculation of the NPV in addition to returns.

Therefore it would have been obvious to one skilled in the art at the time the invention was made to incorporate the process of matching results of a FV propensity rule to the matched accounts, obtaining an attrition rate for the matched accounts, calculating an effective attrition rate for each forecast period from the attrition rate and a net change rate defined in the FV attrition rule for each forecast period, performing the FV attrition rule to calculate an FV expected value from the effective attrition rate and a propensity rule amount defined in the FV attrition rule and storing the FV amount as taught by Sandretto to account for both the increases and decreases of value needed to more accurately estimate future value based upon the iterative and adaptive process disclosed by Johnson. Examiner further notes that propensity is the probability that something is likely to happen, a risk measure. Therefore, it would have also been obvious to one skilled in the art at the time the invention was made that propensity rules are rules that measure and determine risk.

Johnson does not specifically teach applying propensity rules to the selected accounts and applying the attrition rules to results of the propensity rules.

Sandretto teaches applying propensity rules to the selected accounts and applying the attrition rules to results of the propensity rules (column 8, line 60- column 9, line 19).

Therefore it would have been obvious to one skilled in the art at the time the invention was made to apply propensity rules to the selected accounts and applying the attrition rules to results of the propensity rules as taught by Sandretto to account for both the increases and decreases of value needed to more accurately estimate future value. Examiner further notes that propensity is the probability that something is likely to happen, a risk measure. Therefore, it would have also been obvious to one skilled in the art at the time the invention was made that propensity rules are rules that measure and determine risk.

As per claims 4, 22 and 40

Johnson discloses the selected accounts contain current profitability values (current appraisal amount) (column 18, lines 8-20). Examiner notes that C_0 is the investment at time 0 and therefore it would have been obvious to one skilled in the art at the time the invention was made that a current profitability value would be the value at the present time, time 0.

As per claims 5, 23 and 41

Johnson discloses the current profitability data is aggregated to provide an initial amount for the FV calculations (C_1) (column 9, lines 6-10).

As per claims 7, 25 and 43

Johnson discloses the selected rates are FV attrition rates (discount factor) (column 9, lines 3-10).

8. Claims 6, 24 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Number 7,082,411 to Johnson et al (hereinafter Johnson) in view of US Patent Number 5,812,988 to Sandretto (hereinafter Sandretto) further in view of US Patent Number 5,852,811 to Atkins (hereinafter Atkins).

As per claims 6, 24 and 42

Johnson and Sandretto do not specifically teach the selected amounts are forecast amounts.

Atkins discloses the selected amounts are forecast amounts (projected future value of the asset) (column 25, lines 39-45 & 59-65).

Therefore it would have been obvious to one skilled in the art at the time the invention was made that the selected amounts are forecast amounts as taught by Atkins as a type of selected amount found in the database to select in order to determine values and rates regarding the asset utilizing the time value money equations.

9. Claims 8-9, 11-17, 26-27, 29-35, 44-45 and 47-53 rejected under 35 U.S.C.

103(a) as being unpatentable over US Patent Number 7,082,411 to Johnson et al (hereinafter Johnson) in view of US Patent Number 5,812,988 to Sandretto (hereinafter Sandretto) further in view of the Fundamentals of Financial Management by Kuhlemeyer (hereinafter Kuhlemeyer).

As per claims 8, 26 and 44

Johnson and Sandretto do not specifically teach a user specifies one or more forecast periods over which the FV calculations are performed.

Kuhlemeyer teaches a user specifies one or more forecast periods over which the FV calculations are performed (slides 5, 10 and 11).

Therefore it would have been obvious to one skilled in the art at the time the invention was made to permit a user to specify one or more forecast periods over which the FV calculations are performed as taught by Kuhlemeyer to allow comparisons of future values at different time periods. It is required to recognize a range of situations including the worst case in order to make a business judgment considering a measure for risk management.

As per claims 9, 27 and 45

Johnson and Sandretto do not specifically teach a user specifies one or more rates for the forecast periods.

Kuhlemeyer teaches a user specifies one or more rates for the forecast periods (slides 5, 10 and 11).

Therefore it would have been obvious to one skilled in the art at the time the invention was made to permit a user to specify one or more rates for the forecast periods as taught by Kuhlemeyer to allow comparisons of future values at different time periods using specific rates. It is required to recognize a range of situations including the worst case in order to make a business judgment considering a measure for risk management.

As per claims 11, 29 and 47

Johnson discloses calculating the time value of money (column 12, lines 34-36).

Johnson and Sandretto do not specifically teach the FV attrition rate comprises a Constant (no compounding) method according to:

Art Unit: 3693

$\text{Amount}_i = \text{Amount}_0 * (1 + R_0)^{((k-j+1)/12)}$ where Amount_i is the calculated amount by forecast period, Amount_0 is the initial amount, R_0 is the initial rate, i is the forecast period, j is the first month in a forecast period, and k is the last month in a forecast period.

Kuhlemeyer teaches the FV attrition rate comprises a Constant (no compounding) method according to:

$\text{Amount}_i = \text{Amount}_0 * (1 + R_0)^{((k-j+1)/12)}$ where Amount_i is the calculated amount by forecast period (FV), Amount_0 is the initial amount (PV), R_0 is the initial rate (i), i is the forecast period (n), j is the first month in a forecast period, and k is the last month in a forecast period (slides 6, 8, & 11). Examiner notes that although Kuhlemeyer does not specifically teach $((k-j+1)/12)$ it uses a forecast period measured by years and it would have been obvious to one skilled in the art at the time the invention was made to use $((k-j+1)/12)$ to denote a proportion of a year to enable use of the same equation for shorter periods of time.

Therefore it would have been obvious to one skilled in the art at the time the invention was made to incorporate the FV attrition rate comprises a Constant (no compounding) method according to:

$\text{Amount}_i = \text{Amount}_0 * (1 + R_0)^{((k-j+1)/12)}$ where Amount_i is the calculated amount by forecast period, Amount_0 is the initial amount, R_0 is the initial rate, i is the forecast period, j is the first month in a forecast period, and k is the last month in a forecast period as a specific time value of money equation as taught by Kuhlemeyer to allow for a calculation of the future value of present money without compounding.

As per claims 12, 30 and 48

Johnson discloses calculating the time value of money (column 12, lines 34-36).

Johnson and Sandretto do not specifically teach the FV attrition rate comprises a Constant (with compounding) method according to:

$\text{Amount}_i = \text{Amount}_0 * (1 + R_m)^j * ((k-j+1)/12)$ where Amount_i is the calculated amount by forecast period, Amount_0 is the initial amount, R_m is the monthly rate, i is the forecast period, j is the first month in a forecast period, and k is the last month in a forecast period.

Kuhlemeyer teaches the FV attrition rate comprises a Constant (with compounding) method according to:

$\text{Amount}_i = \text{Amount}_0 * (1 + R_m)^j * ((k-j+1)/12)$ where Amount_i is the calculated amount by forecast period (FV), Amount_0 is the initial amount (PV), R_m is the monthly rate (i), i is the forecast period (n), j is the first month in a forecast period, and k is the last month in a forecast period (slides 8, 11 & 24). Examiner notes that although Kuhlemeyer does not specifically teach $((k-j+1)/12)$ it uses a forecast period measured by years and it would have been obvious to one skilled in the art at the time the invention was made to use $((k-j+1)/12)$ to denote a proportion of a year to enable use of the same equation for shorter periods of time.

Therefore it would have been obvious to one skilled in the art at the time the invention was made to incorporate the FV attrition rate comprises a Constant (with compounding) method according to:

$\text{Amount}_i = \text{Amount}_0 * (1 + R_m)^i * ((k - j + 1) / 12)$ where Amount_i is the calculated amount by forecast period, Amount_0 is the initial amount, R_m is the monthly rate, i is the forecast period, j is the first month in a forecast period, and k is the last month in a forecast period as a specific time value of money equation as taught by Kuhlemeyer to allow for a calculation of the future value of present money with compounding.

As per claims 13, 31 and 49

Johnson discloses calculating the time value of money (column 12, lines 34-36).

Johnson and Sandretto do not specifically teach the FV attrition rate comprises an Additive (no compounding) method according to:

$\text{Amount}_i = \text{Amount}_0 * (1 + i * (R_0 / 12)) * ((k - j + 1) / 12)$ where Amount_i is the calculated amount by forecast period, Amount_0 is the initial amount, R_0 is the initial rate, i is the forecast period, j is the first month in a forecast period, and k is the last month in a forecast period.

Kuhlemeyer teaches the FV attrition rate comprises an Additive (no compounding) method according to:

$\text{Amount}_i = \text{Amount}_0 * (1 + i * (R_0 / 12)) * ((k - j + 1) / 12)$ where Amount_i is the calculated amount by forecast period (FV), Amount_0 is the initial amount (PV), R_0 is the initial rate (i), i is the forecast period (n), j is the first month in a forecast period, and k is the last month in a forecast period (slides 8, 11 & 24). Examiner notes that $(i * (R_0 / 12))$ can be rearranged to its equivalent $(R_0 * (i / 12))$. Therefore, although Kuhlemeyer does not specifically teach $(i/12)$ it uses a forecast period measured by years and it would have been obvious to one skilled in the art at the time the invention was made to use $(i/12)$ to denote a rate proportionate to the duration of time year to enable use of the same equation for shorter periods of time. Examiner further notes that although Kuhlemeyer does not specifically teach $((k-j+1)/12)$ it uses a forecast period measured by years and it would have been obvious to one skilled in the art at the time the invention was made to use $((k-j+1)/12)$ to denote a proportion of a year to enable use of the same equation for shorter periods of time.

Therefore it would have been obvious to one skilled in the art at the time the invention was made to incorporate the FV attrition rate comprises an Additive (no compounding) method according to:

$\text{Amount}_i = \text{Amount}_0 * (1 + i * (R_0 / 12)) * ((k - j + 1) / 12)$ where Amount_i is the calculated amount by forecast period, Amount_0 is the initial amount, R_0 is the initial rate, i is the forecast period, j is the first month in a forecast period, and k is the last month in a forecast period as a specific value of money equation as taught by Kuhlemeyer to allow for an additive calculation of the future value of present money without compounding.

As per claims 14, 32 and 50

Johnson discloses calculating the time value of money (column 12, lines 34-36).

Johnson and Sandretto do not specifically teach the FV attrition rate comprises an Additive (with compounding) method according to:

$Amount_i = Amount_0 * (1 + Compounded_Rate)^{((k-j + 1)/12)}$ where $Amount_i$ is the calculated amount by forecast period (FV), $Amount_0$ is the initial amount (PV), i is the forecast period (n), j is the first month in a forecast period, k is the last month in a forecast period, and $Compounded_Rate$ is $Rate_1 * Rate_2 * \dots * Rate_i$ (i).

Kuhlemeyer teaches the FV attrition rate comprises an Additive (with compounding) method according to:

$Amount_i = Amount_0 * (1 + Compounded_Rate)^{((k-j + 1)/12)}$ where $Amount_i$ is the calculated amount by forecast period (FV), $Amount_0$ is the initial amount (PV), i is the forecast period, j is the first month in a forecast period, k is the last month in a forecast period, and $Compounded_Rate$ is $Rate_1 * Rate_2 * \dots * Rate_i$ (slides 8, 11 & 24). Examiner notes that a compounded rate to one skilled in the art at the time the invention was made would be found by $(1+Rate_1)*(1+Rate_2)*\dots*(Rate_i)$, whereby when the rates are equivalent would be the equivalent of $(1+Rate)^i$ which the reference clearly shows in slides 8 and 11. However, as written examiner notes that $Compounded_Rate$ is $Rate_1 * Rate_2 * \dots * Rate_i$; whereby when the rates are equivalent could be rewritten as $Rate^i$. $Rate^i$ is in essence another value or rate that the reference teaches in slides 8 and 11. Examiner further notes that although Kuhlemeyer does not specifically teach $((k-j + 1)/12)$ it uses a forecast period measured by years and it would have been obvious to one skilled in the art at the time the invention was made to use $((k-j + 1)/12)$ to denote a proportion of a year to enable use of the same equation for shorter periods of time.

Therefore it would have been obvious to one skilled in the art at the time the invention was made to incorporate the FV attrition rate comprises an Additive (with compounding) method according to:

$Amount_i = Amount_0 * (1 + Compounded_Rate)^{((k-j + 1)/12)}$ where $Amount_i$ is the calculated amount by forecast period (FV), $Amount_0$ is the initial amount (PV), i is the forecast period (n), j is the first month in a forecast period, k is the last month in a forecast period, and $Compounded_Rate$ is $Rate_1 * Rate_2 * \dots * Rate_i$ (i) as taught by Kuhlemeyer to allow for an additive calculation of the future value of present money with compounding.

As per claims 15, 33 and 51

Johnson discloses calculating the time value of money (column 12, lines 34-36).

Johnson and Sandretto do not specifically teach the FV attrition rate comprises a Manual (no compounding) method according to:

$Amount_i = Amount_0 * (1 + R_{man})^{((k-j + 1) / 12)}$ where $Amount_i$ is the calculated amount by forecast period (FV), $Amount_0$ is the initial amount, R_{man} is the manual rate, i is the forecast period, j is the first month in a forecast period, and k is the last month in a forecast period.

Kuhlemeyer teaches the FV attrition rate comprises a Manual (no compounding) method according to:

$Amount_i = Amount_0 * (1 + R_{man})^{((k-j + 1) / 12)}$ where $Amount_i$ is the calculated amount by forecast period (FV), $Amount_0$ is the initial amount (PV), R_{man} is the manual rate (i), i is the forecast period (n), j is the first month in a forecast period, and k is the last month in a forecast period (slides 8, 11 & 24). Examiner notes that although

Kuhlemeyer does not specifically teach $((k-j+1)/12)$ it uses a forecast period measured by years and it would have been obvious to one skilled in the art at the time the invention was made to use $((k-j+1)/12)$ to denote a proportion of a year to enable use of the same equation for shorter periods of time.

Therefore it would have been obvious to one skilled in the art at the time the invention was made to incorporate the FV attrition rate comprises a Constant (with compounding) method according to:

$Amount_i = Amount_0 * (1 + R_m)^i * ((k-j+1)/12)$ where $Amount_i$ is the calculated amount by forecast period, $Amount_0$ is the initial amount, R_m is the monthly rate, i is the forecast period, j is the first month in a forecast period, and k is the last month in a forecast period as a specific time value of money equation as taught by Kuhlemeyer to allow for a manual calculation of the future value of present money without compounding.

As per claims 16, 34 and 52

Johnson discloses calculating the time value of money (column 12, lines 34-36).

Johnson and Sandretto do not specifically teach the FV attrition rate comprises a Manual (with compounding) method according to:

$Amount_i = Amount_0 * (1 + Compounded_Rate) * ((k-j+1)/12)$ where $Amount_i$ is the calculated amount by forecast period, $Amount_0$ is the initial amount, i is the forecast period, j is the first month in a forecast period, k is the last month in a forecast period, and $Compounded_Rate$ is $Rate_1 * Rate_2 * \dots * Rate_i$.

Kuhlemeyer teaches the FV attrition rate comprises a Manual (with compounding) method according to:

$Amount_i = Amount_0 * (1 + Compounded_Rate) * ((k-j+1)/12)$ where $Amount_i$ is the calculated amount by forecast period (FV), $Amount_0$ is the initial amount (PV), i is the forecast period, j is the first month in a forecast period, k is the last month in a forecast period, and $Compounded_Rate$ is $Rate_1 * Rate_2 * \dots * Rate_i$ (slides 8, 11 & 24). Examiner notes that a compounded rate to one skilled in the art at the time the invention was made would be found by $(1+Rate_1)*(1+Rate_2)*\dots*(Rate_i)$, whereby when the rates are equivalent would be the equivalent of $(1+Rate)^i$ which the reference clearly shows in slides 8 and 11. However, as written examiner notes that $Compounded_Rate$ is $Rate_1 * Rate_2 * \dots * Rate_i$ whereby when the rates are equivalent could be rewritten as $Rate^i$. $Rate^i$ is in essence another value or rate that the reference teaches in slides 8 and 11. Examiner further notes that although Kuhlemeyer does not specifically teach $((k-j+1)/12)$ it uses a forecast period measured by years and it would have been obvious to one skilled in the art at the time the invention was made to use $((k-j+1)/12)$ to denote a proportion of a year to enable use of the same equation for shorter periods of time.

Therefore it would have been obvious to one skilled in the art at the time the invention was made to incorporate the FV attrition rate comprises a Manual (with compounding) method according to:

$Amount_i = Amount_0 * (1 + Compounded_Rate) * ((k-j+1)/12)$ where $Amount_i$ is the calculated amount by forecast period (FV), $Amount_0$ is the initial amount (PV), i is the forecast period (n), j is the first month in a forecast period, k is the last month in a

forecast period, and Compounded_Rate is $\text{Rate}_1 * \text{Rate}_2 * \dots * \text{Rate}_i(i)$ as taught by Kuhlemeyer to allow for an additive calculation of the future value of present money with compounding.

As per claims 17, 35 and 53

Johnson discloses calculating the time value of money (column 12, lines 34-36).

Johnson and Sandretto do not specifically teach the FV attrition rate comprises a Constant method according to:

$\text{Amount}_i = \text{Amount}_0$ where Amount_i is the calculated amount by forecast period, Amount_0 is the initial amount, and i is the forecast period.

Kuhlemeyer teaches the FV attrition rate comprises a Constant method according to:

$\text{Amount}_i = \text{Amount}_0$ where Amount_i is the calculated amount by forecast period (FV), Amount_0 is the initial amount (PV), and i is the forecast period (n) (slide 3).

Therefore it would have been obvious to one skilled in the art at the time the invention was made to incorporate the FV attrition rate comprises a Constant method according to:

$\text{Amount}_i = \text{Amount}_0$ where Amount_i is the calculated amount by forecast period, Amount_0 is the initial amount, and i is the forecast period as taught by Kuhlemeyer to allow for a constant calculation of the future value of present money.

Allowable Subject Matter

10. Claims 18, 36 and 54 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JESSICA L. LEMIEUX whose telephone number is (571)270-3445. The examiner can normally be reached on Monday-Thursday 8AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Kramer can be reached on 571-272-6783. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jessica L Lemieux
Examiner
Art Unit 3693

/J. L. L./
Examiner, Art Unit 3693
January 2009

/Stefanos Karmis/
Primary Examiner, Art Unit 3693